OK to enter
Acd 8

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Previously Presented) An electrically isolated power transfer MEMS device for delivering electric power to a load, the device comprising:

a source generator including a movable member, wherein the source generator converts an electrical input signal to a displacement of the movable member;

a ~~power transfer structure defining~~ beam having an input end in communication with the movable member that receives the displacement, and an output end opposite the input end that communicates the displacement, wherein at least a portion of the ~~power transfer structure~~ beam between the input and output ends is insulating to prevent electrical conduction between the input end and the output end;

an electrical generator disposed at ~~a second~~ the output end of the ~~device~~ beam receiving the displacement from the output end of the ~~power transfer structure~~ beam and, in response to the displacement, ~~generates~~ generating electrical power that is delivered to the load;

wherein the electrical generator comprises an electrical loop formed of at least one of:

a plurality of movable arms connected to the beam and electrically connected in series and;

a plurality of movable arms connected to the beam and electrically connected in parallel; ~~having movable conductive arm in mechanical communication with the beam~~,

wherein movement of the beam deflects the ~~arm~~ plurality of arms in the presence of a magnetic field to generate power for the load.

2-9. (Canceled)

10. (Original) The device as recited in claim 1, wherein the source generator comprises a Lorentz actuator including a movable arm in mechanical communication with the beam, wherein electrical current is supplied to the arm in the presence of a magnetic field to generate a force that displaces the movable member.

Submitted 8/28
OK to enter
Ad. S

Amendment to the Specification:

Please replace paragraph [0038] with the following amended paragraph.

Referring now to Fig. 10, transfer structure 21 is illustrated in accordance with an alternate embodiment. In particular, structure 21 includes a lever 70 that extends substantially transversely, and is hinged connected to substrate 14 at joint 72. Lever 70 defines a first end 74 proximal joint 72 and a second end 76 opposite the first end 74. It should be appreciated that lever can be pivoted about joint 72 which will cause second end 76 to deflect longitudinally a significant distance greater than first end 74. A first beam 12 extends longitudinally from source, as described above, and is connected at its outermost end to first end 74 of joint 72. A second beam 12 ~~[can both the first beam 12 and the second beam 12 both be numbered 12?]~~ extending longitudinally inwardly from generator 22 is connected to the second end of lever 70. Both beams 12 preferably include an insulating member 13 to provide electrical isolation, as described above. During operation, deflection of first beam 12 acts against the first end 74 of the lever 70 and causes the lever to pivot about joint 72. The deflection of first beam 12 is thus magnified at the second end 76, which causes translation of second beam 12. The increased beam translation causes greater deflection of movable arm 24. Accordingly, transfer structure 21 illustrated in Fig. 10 amplifies the source input and causes a higher power output from generator 22.